

Platen With Diaphragm and Method for Optimizing Wafer Polishing

5

ABSTRACT OF THE DISCLOSURE

A platen is provided for use in a chemical mechanical planarization (CMP) system. The platen is provided with diaphragms that overcome a fluid-conservation problem experienced in prior air-bearing platens. The diaphragms enable a removal profile to be manipulated by configuring one or more diaphragms to control localized polishing pressure while capturing free-flowing fluid that is input to the apparatus. The diaphragms also minimize loss of normally-free-flowing fluid from a fluid-bearing.